Matthews Electroplating

EPA Region 3 EPA ID# VAD980712970 Last Update: August

Virginia 2002

Roanoke County

2 miles west of Colom 6th Congressional District

2 miles west of Salem Other Names: None

Current Site Status

The U.S. Environmental Protection Agency in conjunction with the Commonwealth of Virginia determined that the site contamination no longer posed a threat to human health or the environment, and EPA deleted the site from the National Priority List on December 27, 1988. On April 19, 1999, EPA conducted a five-year review. Soil samples were collected to evaluate the potential risk at the site. EPA has concluded that the site should pose no unacceptable risk to human health under a residential exposure scenario.

Site Description

The Matthews Electric Plating site located in Roanoke County, Virginia (6th Congressional District) was a 1.7-acre site that plated automobile bumpers with a process using chromium and nickel from 1972 until 1976. In response to complaints of discolored drinking water from local residents in November 1975, the Virginia State Water Control Board (SWCB) confirmed ground water contaminated with

chromium and soil contaminated with chromium, nickel and cyanide were as a result of poor waste management practices. Liquid waste from the plating operation had been discharged directly onto the ground and drained to a sinkhole beneath the property. In 1976, the SWCB issued an Emergency Order that prohibited the further discharge of electroplating waste from the plant. The facility went out of business in 1977 and was then used as a small-scale pig farming operation. Subsequent investigations performed by the SWCB and the EPA determined that the on-site well and ten local residential wells were contaminated with hexavalent chromium. The population within 3 miles of the site is approximately 3,000.

Site Responsibility

Cleanup of this site was the responsibility of Federal and State governments.

NPL Listing History

This site was proposed to the National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites requiring long term remedial action on December 30, 1982. The site was formally added to the list on September 8, 1983, making it eligible for federal cleanup funds. The site was deleted from the list on January 19, 1989.

Threats and Contaminants

Ground water was contaminated with chromium residues from the former electroplating operations. Soil was contaminated with chromium, nickel, and cadmium. Potential threats included accidental ingestion or direct contact with contaminated ground water or soil.

Contaminant descriptions and associated risk factors are available on the Agency for Toxic Substance and Disease Registry, an arm of the CDC, web site at http://www.atsdr.cdc.gov/hazdat.html

Cleanup Progress

In 1979, the owner of the property removed waste materials, constructed diversion ditches, and covered parts of the area with clay cap. In the spring of 1983, EPA selected a remedy to protect local ground water users from contaminated drinking water. The selected

remedy provided for extending the municipal water supply from the water treatment plant in Salem. The EPA constructed the water line and 28 homes were connected in 1986. In 1987, EPA conducted soil sampling and additional ground water sampling which demonstrated that no further cleanup actions were needed. In 1988, the EPA removed approximately 1,500 gallons of chromium and mercury waste solution and sludges that were contained in drums and tanks. Subsequently, EPA in conjunction with the Commonwealth of Virginia determined that the site contamination no longer posed a threat to human health or the environment, and EPA deleted the site from the NPL. On April 19, 1999, EPA conducted a five-year review. As a part of the review, EPA collected and analyzed the soil on-site and conducted a risk assessment. EPA has concluded that the site should pose no unacceptable risk to human health under a residential exposure scenario.

Contacts

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The detailed Administrative Record can be examined at the following location:

Salem Public Library 28 East Main Street Salem, VA 24153 703-375-3089

U.S. EPA Region III 6th Floor Docket Room 1650 Arch Street Philadelphia, PA 19103 215-814-3157